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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/712,873

11/15/2000

Jason D. Kridner

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TEXAS INSTRUMENTS INCORPORATED

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DALLAS, TX 75265

EXAMINER

NALVEN, ANDREW L

ART UNIT

PAPER NUMBER

2134

NOTIFICATION DATE

DELIVERY MODE

03/28/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/712,873	Applicant(s) KRIDNER, JASON D.	
	Examiner ANDREW L. NALVEN	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-23 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant argues that DeLuca fails to teach determining an authorization state by comparing a mathematical function result executed by the digital signal processor to an expected result and wherein the disable signal may be generated when the electronic device satisfies one or more sleep conditions. Examiner respectfully disagrees.

DeLuca teaches determining an authorization state by comparing a mathematical function result executed by the digital signal processor to an expected result (DeLuca, column 6 lines 41-49, does compare operation to determine if there is a match).

DeLuca teaches a mathematical function by teaching a comparison operation. The comparison operation compares a value to a predetermined expected value (DeLuca, column 6 lines 41-49). DeLuca's comparison operation is a type of mathematical function because all computer functions are mathematical functions. Thus, the comparison of two values in order to determine a match by a computer is thus a mathematical function. As a result, Examiner maintains that DeLuca teaches

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determining an authorization state by comparing a mathematical function result executed by the digital signal processor to an expected result.

4. Further, the combination of DeLuca, Seo, Tran and Nagata teach the disable signal may be generated when the electronic device satisfies one or more sleep conditions. Tran teaches a disable signal generated when the electronic device satisfies one or more sleep conditions (Tran, column 2 lines 34-42). Tran teaches the disable signal by teaching that when a sleep mode is entered, a disable signal in the form of a mute signal is generated. As a result, Examiner maintains the rejections below.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca et al US Patent No 5,612,682 in view of Seo et al US Patent No 5,063,597, Tran US Patent No. 5,734,729, and Nagata US Patent No. 6,114,981.

7. With regards to claims 1 and 12, DeLuca teaches a digital signal processor (DeLuca, column 4 lines 59-67) operable to provide digital data output (DeLuca, column 7 lines 34-38), determines an authorization state by comparing a mathematical function

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result executed by the digital signal processor to an expected result (DeLuca, column 6 lines 41-49, does compare operation to determine if there is a match), and generate a disable signal (DeLuca, column 6 lines 49-52). DeLuca fails to teach a digital to analog converter operable to receive the disable signal and the disable signal being generated when a sleep condition is met. Seo teaches a digital to analog converter (Seo, column 3 lines 32-38) coupled to a digital signal processor and operable to receive the digital data output (Seo, Figure 4 Items 41 and 40), convert the digital data to corresponding analog data (Seo, column 3 lines 32-38), output the corresponding analog data (Seo, column 3 lines 32-38, Figure 2C), mute the output of the corresponding analog data (Seo, column 3 lines 32-38), receive the disable signal (Seo, column 3 lines 32-34), and mute the output of the corresponding analog data in response to the disable signal (Seo, Figures 2B and 2C, column 3 lines 14-38). Nagata teaches a digital to analog converter including an input operable to receive the disable signal (Nagata, column 4 lines 28-49, D/A converter with mute control, Figure 3, column 1 lines 51-61). Tran teaches a disable signal generated when the electronic device satisfies one or more sleep conditions (Tran, column 2 lines 34-42). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Seo's method of muting in response to a disable signal, Tran's method of disabling when a sleep condition is met, and Nagata's placement of the disable signal with DeLuca's communication device because it offers the advantage of providing an improved muting system that limits disturbing noises that are generated during the process of turning off power to the system or by external influences (Nagata, column 1 lines 35-50) and the

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reduction of transient noises associated with shutdowns or sleep modes (Tran, column 2 lines 34-42).

8. With regards to claims 2, 10 and 15, DeLuca as modified teaches the authorization state either being positive or negative (DeLuca, column 6 lines 42-52) and further teaches the digital signal processor operative to generate the disable signal when the authorization state is negative (DeLuca, column 7 lines 2-7).

9. With regards to claim 3, DeLuca as modified teaches the serial input for receiving timing signals to enable reception of the disable signal (Seo, column 3 lines 55-58).

10. With regards to claims 4 and 13, DeLuca as modified teaches the output muted by filtering the received digital data prior to conversion into analog data (Seo, column 3 lines 3-31).

11. With regards to claim 5, DeLuca as modified teaches the output pin operable to transmit the disable signal as a high voltage (Seo, column 3 lines 50-51).

12. With regards to claim 6 (as best understood), DeLuca as modified teaches the output pin operable to transmit a low voltage in the absence of a disable signal (Seo, column 3 lines 50-54).

13. With regards to claims 7 and 11, DeLuca as modified teaches the authorization state is either positive or negative and the DSP is not operable to generate the disable signal when the authorization state is negative (DeLuca, column 10 lines 15-24).

14. With regards to claims 8 and 16-17, DeLuca as modified teaches the digital signal processor having at least two output pins where the first pin provides a clock signal and the second pin provides a disable signal and the state of the disable signal at

the rising edges of the clock signal re read by the converter (Seo, column 2 lines 62-66, column 3 lines 14-18).

15. With regards to claims 9 and 14, DeLuca as modified teaches an analog amplifier operable to receive the disable signal after analog conversion (Seo, Figure 1).

16. With regards to claim 18, DeLuca as modified teaches the generating of a power-save signal (Seo, column 3 lines 42-44) where the disable signal is generated in response to the power-save signal (Seo, column 3 lines 50-54).

17. With regards to claim 21, DeLuca as modified teaches one of the sleep conditions is usage of the electronic device (DeLuca, column 7 lines 30-52).

18. With regards to claim 22, DeLuca as modified teaches the electronic device being a music player, video player, or multimedia file player (DeLuca, column 5 lines 8-22).

19. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca et al US Patent No 5,612,682, Seo et al US Patent No 5,063,597, Tran US Patent No. 5,734,729, and Nagata US Patent No. 6,114,981 as applied to claim 12 above, and further in view of Lipovski US Patent No 6,675,002.

20. With regards to claims 19-20, DeLuca as modified fails to teach the generating of an override signal in response to a disable signal. Lipovski teaches the generating of an override signal in response to the step of generating a disable signal and terminating the muting step in response to the override signal (Lipovski, column 6 lines 33-44). At

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the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Lipovski's method of overriding a disable signal because it offers the advantage of allowing sound output in the event of an emergency (Lipovski, column 6 lines 33-36).

21. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca et al US Patent No 5,612,682, Seo et al US Patent No 5,063,597, Tran US Patent No. 5,734,729, and Nagata US Patent No. 6,114,981 as applied to claim 12 above, and further in view of Fette et al US Patent No. 6,052,600.

22. With regards to claim 23, DeLuca as modified teaches selecting a data file (Tran, column 5 lines 8-22), but fails to teach performing a hash function on the data file by the DSP. However, Fette teaches performing a hashing function on the data to generate the mathematical function result wherein the hashing function is executed by the digital signal processor (Fette, column 6 lines 31-45, processor is a DSP, column 9 lines 5-15, hash of the software program to compare to a predetermined hash). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Fette's hashing method with DeLuca as modified because it offers the advantage of providing assurances that files are uncorrupted and that the file will act to predetermined specifications (Fette, column 2 lines 1-7).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW L. NALVEN whose telephone number is (571)272-3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Andrew L Nalven/
Examiner, Art Unit 2134

/Kambiz Zand/
Supervisory Patent Examiner, Art Unit 2134